

AMENDMENTS

IN THE CLAIMS:

1-22. (Cancelled)

23. (Currently Amended) An apparatus for detecting a particulate in a fluid, the apparatus comprising

a platform comprising a substrate having a surface, wherein said surface defines a detection chamber comprising an area that is coated with a specific binding reagent that specifically binds to the particulate to be detected;

a fluid sample input means in fluid communication with the detection chamber that is coated with the specific binding reagent;

a wash buffer reservoir containing a wash buffer in fluid communication with the detection chamber that is coated with the specific binding reagent;

a fluid waste receptacle in fluid communication with the detection chamber that is coated with the specific binding reagent;

wherein an amount of a fluid sample comprising a particulate is moved from the fluid sample input means to the detection chamber and incubated thereon for a time sufficient to result in specific binding between the particulate in the fluid sample and the specific binding reagent in the detection chamber; and

wherein the fluid sample is replaced with the wash buffer and displaced into the fluid waste receptacle; and

wherein the wash buffer is further displaced into the fluid waste receptacle; and

wherein a particulate specifically bound to the detection chamber is specifically bound to the specific binding reagent and is detected thereupon, ~~according to claim 19~~ further comprising a device, wherein the device has a surface or cavity that accommodates the platform, and a light source positioned to illuminate the platform and wherein the detection chamber further comprises alternating transparent and reflective regions.

24. (Previously Presented) An apparatus according to claim 23, wherein the alternating transparent and reflective regions define a pattern in the detection chamber.

25. (Previously Presented) An apparatus according to claim 23 wherein the specific binding reagent is present on the surface of the platform on a transparent region thereof.

26. (Cancelled)

27. (Currently Amended) An apparatus for detecting a particulate in a fluid, the apparatus comprising

a platform comprising a substrate having a surface, wherein said surface defines a detection chamber comprising an area that is coated with a specific binding reagent that specifically binds to the particulate to be detected;

a fluid sample input means in fluid communication with the detection chamber that is coated with the specific binding reagent;

a wash buffer reservoir containing a wash buffer in fluid communication with the detection chamber that is coated with the specific binding reagent;

a fluid waste receptacle in fluid communication with the detection chamber that is coated with the specific binding reagent;

wherein an amount of a fluid sample comprising a particulate is moved from the fluid sample input means to the detection chamber and incubated thereon for a time sufficient to result in specific binding between the particulate in the fluid sample and the specific binding reagent in the detection chamber; and

wherein the fluid sample is replaced with the wash buffer and displaced into the fluid waste receptacle; and

wherein the wash buffer is further displaced into the fluid waste receptacle; and

wherein a particulate specifically bound to the detection chamber is specifically bound to the specific binding reagent and is detected thereupon, wherein the detection chamber that is coated with a specific binding reagent is further treated with a blocking agent that prevents non-specific binding to the surface of the platform, and ~~according to claim 26~~ wherein the specific binding reagent is present in the detection chamber on transparent regions thereof, and the blocking reagent is present in the detection chamber on transparent and reflective regions thereof.

28. (Cancelled)